NOTES:

a. Unless otherwise noted, Ohio production ranking among States by commodity was taken from Ohio Agricultural Statistics - 1980, (Columbus: Ohio Crop Reporting Service, 1981), pp. 51-52.

b. The percentage imported was determined by subtracting the production divided by consumption figure from 1.00.

c. The percentage exported was calculated using the formula: production minus consumption divided by production.

d. 1980 production figures were used whenever possible generally from Ohio Agricultural Statistics - 1980, Agricultural Statistics 1980, (Washington: USDA, 1980) or 1978 Census of Agriculture (Washington: U.S. Dept. of Commerce, 1981) Vol. I, Part 35 (AC 78-A35).

e. Dr. Vern Harnapp, Associate Professor of Geography, University of Akron, and student assistants gathered the data for this column, with a few exceptions. Agricultural Statistics 1980 (Washington: USDA, 1980) was the primary source.

f. Dr. Vern Harnapp and student assistants gathered per pound retail prices in the Akron, Ohio area at Kroger, Sparkle and Acme supermarkets. "In order to even out seasonal fluctuations and specials, surveys of shelf prices were taken three times -- winter, spring and late summer, 1981."

g. 1980 national per capita consumption data were taken from Food Consumption, Prices and Expenditures; 1960-1980 (Washington: USDA, 1981) Statistical Bulletin Number 672 from The Economic Research Service. The per capita figures were multiplied by Ohio's 1980 population of 10,797,419 to obtain the figures for this column. When farm weight consumption was not given, conversion from retail to farm weight equivalent was accomplished using tables in Conversion Factors and Weights and Measures for Agricultural Commodities and their Products (Washington: USDA, 1979), Economics Statistics and Cooperative Service Statistic Bulletin No. 616.

h. Dr. Vern Harnapp and student assistants used Food Consumption, Prices and Expenditures, 1960-1980 (cited above) times Ohio's 1980 population of 10,797,419 to arrive at the number in this column, with a few exceptions.

i. Dr. Vern Harnapp and student assistants obtained the figures in this column by multiplying the retail weight of Ohio's consumption by the retail cost (per pound) whose derivation is cited in footnote f.

j. The percentage of the commodity imported (see[b]) was multiplied by the retail value of its consumption (see[i]) to determine the data in this column.

k. The percentage of the commodity exported (see[c]) was multiplied by the retail value of its production (see[f]) to determine the data in this column.

l. The acreages required to produce all of Ohio's consumption were determined by Dr. Vern Harnapp and student assistants at the University of Akron using the guidelines set forth in The State of Your Food: A Manual for State Food Systems Analysis (Emmaus, PA: Rodale Press, 1981), pp. 13-21. In the case of the grains, fruits and vegetables this simply involves dividing the farm weight of consumption by the average yield weight per acre.

m. Cattle and calves production rank, Ohio Agricultural Statistics, 1980, p. 51.

n. The farm weight for beef/veal and other meats uses the carcass weight.

o. Using a paper by William Lockeretz, Agricultural Resources Consumed in Beef Production Systems (St. Louis: Washington Univ. Center for the Biology of National Systems, 1975), Indiana data indicate that .17 acres of land is used for corn and silage, plus .45 acres of intensive pasture or hay to produce 100 pounds of (retail weight) beef.

p. Raising a Small Flock of Sheep (Washington: USDA, 1977), Farmers Bulletin #2222 was used to calculate the acreage.

q. Pork production live weight of 692,729 was multiplied by .65 to get 449,981 lbs. retail weight. Since 73.4 lbs of carcus weight equals 68.3 lbs of retail weight (Food Consumption, Prices and Expenditures, p. 6) carcass production equals 449,981 x 73.4 ÷ 68.3 = 483,551.

r. Pork consumption land requirements are derived from 16 bushels of corn required to produce a 225 pound hog (live weight) The State of Your Food , p. 18

s. Chicken rank is based on broiler production, Ohio Agricultural Statistics, 1980, p. 51 (hereinafter O.A.S.)

t. This is live weight broiler production in 1980, O.A.S.

u. Live weight equivalent for consumption.

v. The O.A.S. figure of 2,333 million eggs was divided by 12 and multiplied by 1.57 (lbs/doz, Food Consumption etc., p. 8) to obtain poundage.

w. Live weight

x. 1978 Census of Agriculture, Vol. I Part 35, p. 16 lists 814 farms of 62,000 lbs of catfish and 267,661 pounds of other fish (excluding tropical and bait fish).

y. This and most subsequent dairy production figures come from Ohio Dairy Products, 1980 Annual Report (Columbus: Ohio Crop Reporting Service, 1981). This figure is a preliminary estimate.

z. This cottage cheese figure combines lowfat, creamed and curd figures.

aa. A retail price of $ .85/lb was found at the Continental, Ohio Supervalue, and was used for the retail value calculations.

bb. From O.A.S. production of 4,310 million pounds is deducted 40 million pounds fed to calves

cc. The percentage of grain which is directly consumed by humans was derived using national figures from the National Feed and Grain Association, the American Soybean Association and the Corn Refiners Association. The percentages going to human consumption came out as follows: 2.4% for barley; 9.75% for corn; 8% for oats; 14.7% for rye and 2% for soybeans. These figures exclude grain used in alcohol production.

dd. Food Consumption, Prices and Expenditures lists grain products on pp. 26 & 27, with the per capita consumption in processing level equivalents. Later, on pp. 75-76, it lists grain consumption on a grain equivalent basis. The former was used for retail weight and the latter for farm weight consumption throughout the grain section. The same retail/farm percentage was used to determine retail weights for grain production.

ee. The vegetables, like the fruits that follow, come in different forms and storage modes, each requiring conversion factors to determine farm weight consumption. For example, per capita canned asparagus consumption is 0.3 pounds for 1980 (Food Consumption etc p. 23). Conversion to its farm weight equivalent requires multiplying by 1.22 (Conversion Factors...p. 71). With frozen asparagus consumption of .06 pounds, the conversion factor is 1.92 (same sources).

ff. Production figures for MINOR vegetable crops must usually be assembled from different sources. For example, the 1978 Census of Agriculture shows on page 174 that 158 acres of asparagus were grown commercially in Ohio in 1978. In order to determine yield, Vegetables: 1981 Annual Summary, Acreage, Yield Production, and Value (Washington: USDA, 1981) was used. Page 32 of that source lists yield per acre from the major asparagus producing states, of which Michigan is the closest. Its average yield for 1979-81 was found to be 11 hundredweight (cwt) per acre and this yield was assumed to be the same as Ohio's. 158 acres x 1.1 K lbs/acre = 174 K lbs. Similar procedures were used for most minor vegetables.

gg. Production was usually assumed to be for the fresh market, as no comprehensive statistics are kept on processing once food leaves the farm. When the size of the processing food is large, as in pickles and sauerkraut, figures are available and are given.

hh. Mushrooms, though not a vegetable, had to be placed somewhere. Mushroom consumption was figured by adding the '78 U.S. production of 452,183 K lbs to the 88,312 K lbs of imports (40,051 metric T (Ag Stat., p. 264) x 2.205 (conversion factor) and dividing by the '78 U.S. population of 216,600,000 (Ag. Stat. '80, p. 550) to obtain 2.5 per capita consumption.

ii. While Ohio had 777 acres of pumpkins and 481 acres of squash in 1978 ('78 Census of Ag., p. 176), I've been unable to find any yield statistics so the acreage could be translated into production. Hence the void.

jj. For processed corn the farm weight consumption was divided by 70 cwt (O.A.S., p. 4), Ohio's average yield per acre in order to arrive at the canned and frozen corn acreage requirements.

kk. Rather than list separately canned whole tomatoes, catsup, sauce, paste, pulp, puree and juice, these were combined into processed after appropriate conversion factors translated the retail weight into farm weight.

ll. An additional publication is used in the Fruit section: Non-citrus Fruits and Nuts: 1980 Annual Summary, Production Use, Value (Washington: USDA, 1981) Crop Reporting Board, Economics and Statistics Service, FrNt 1-3 ('81).

mm. An average yield of 24 cwt for blackberries and raspberries was used to figure acreage. This came from a 1976 survey reported in Charles Carter, Homer Carter, Kenneth Ackers, et. al. Ohio's Strawberry, Raspberry, and Blackberry Industry: Potentials and Problems of an Expanding Industry (Wooster: OARDC, 1978), Research Circular 242, p. 7.

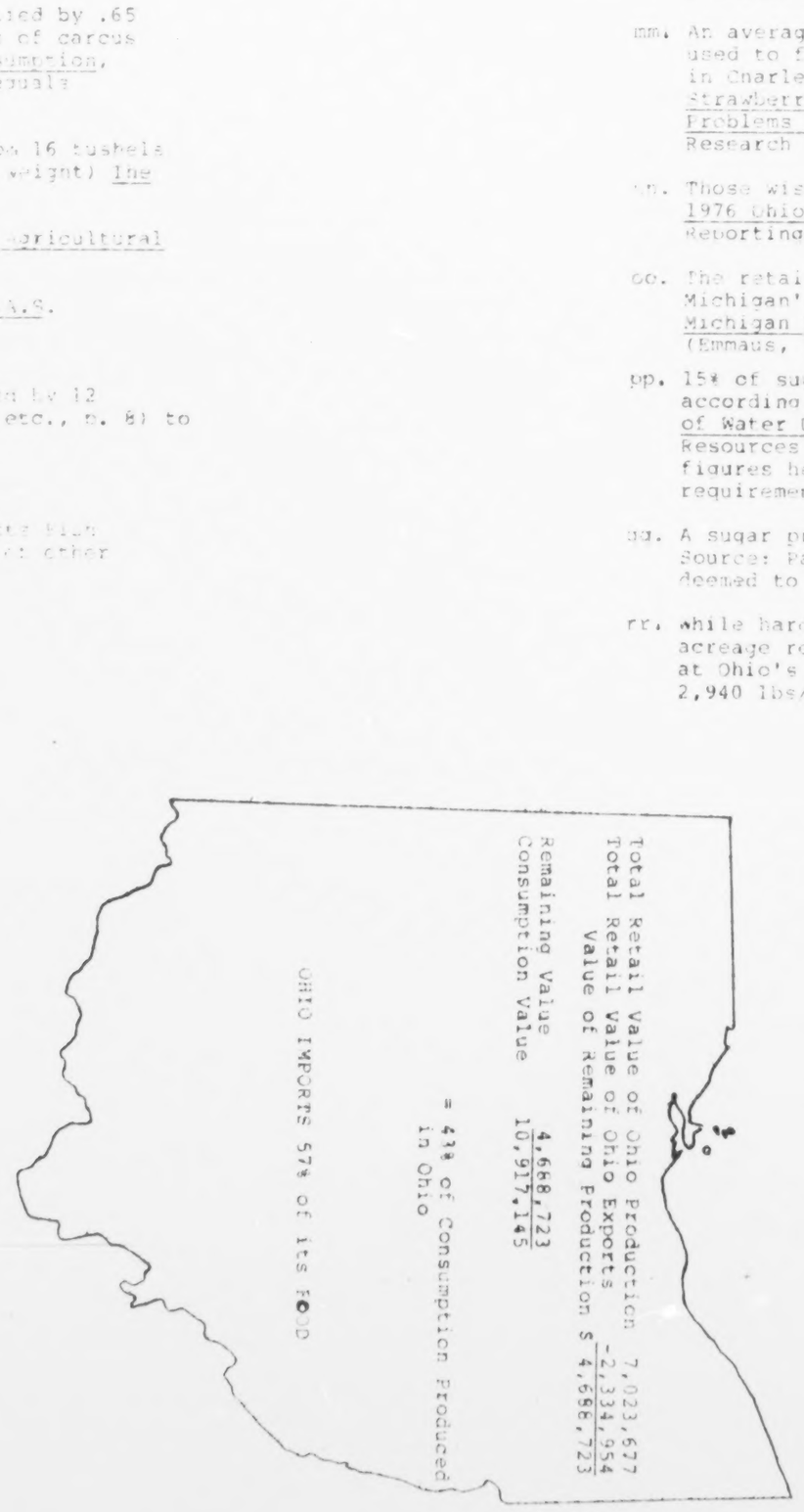
nn. Those wishing to know more about Ohio vineyards might read 1976 Ohio Fruit Tree and Vineyard Survey (Columbus: Ohio Crop Reporting Service USDA, 1976).

oo. The retail value of Ohio's consumption was derived from Michigan's figure, Richard Struthers and Rosemary Lewando, The Michigan Food System: Increasing Dependence or Self Reliance? (Emmaus, PA.: Rodale Press, 1982), p. 28.

pp. 15% of sugar beets, by weight, can become refined sugar according to George C. Lof and Allen K. Kreese, The Economics of Water Utilization in the Beet Sugar Industry (Washington: Resources for the Future, 1968,) p. 11. The consumption figures here are for all sugar, beet and cane, and the acreage requirement assumes all sugar would be coming from beets.

qq. A sugar price of 28¢/lb was used for this calculation. Source: Paul's IGA Oakwood Ohio, September '82 special was deemed to be equal to the 1981 regular price.

rr. While hard wheat generally isn't grown in Ohio, for this acreage regional figure, it was assumed that it could be and at Ohio's average wheat (soft) yield of 49 bushels /acre or 2,940 lbs/acre.


Total Retail Value of Ohio Production 7,023,677
Total Retail Value of Ohio Exports -2,334,954
Value of Remaining Production $ 4,668,723
Remaining Value Consumption Value 4,668,723 10,917,145
= 41% of Consumption Produced in Ohio
OHIO IMPORTS 57% of its FOOD